

EDUCATION

- **Thomas Jefferson High School for Science and Technology** Alexandria, VA
Computer Systems Research; GPA: 4.253 Sep 2016 – Jun 2020
 - **Relevant Coursework:** AP Computer Science + Data Structures, Artificial Intelligence, Parallel Computing, Web Development, Mobile Development, AP Physics.

EXPERIENCE

- **Phone2Action** Rosslyn, VA
Civic Tech Engineering Fellow Jun 2018 - Aug 2018
 - **Facebook Messenger Bot:** Expanded on winning HackTJ 2018 Project working on a chatbot to connect users to local politicians using natural language processing.

PROJECTS

- **SeizureSight:** Created one of the first models to predict types of seizures based off electroencephalographic data. Performs a multitaper transformation and achieves 91.24% accuracy on seizure classification.
- **Low Cost Glaucoma Detection:** Created a convolutional neural network to detect the presence of glaucoma in fundus images. Modeled an Android phone app to detect glaucoma, based off results from convolutional neural network.

ACCOMPLISHMENTS

- **AIME Qualifier:** Qualified by being top 5% in nation for American Invitation Mathematics Examination.
- **HackTJ 2019:** Developed parser to turn physical coding blocks into runnable code using Computer Vision. Won Best Design Award.
- **BioCode:** Achieved 2nd place in Bioinformatics computer science competition using algorithmic approaches toward the Biology field.
- **HackTJ 2017:** Created an online platform teaching students to learn how to code, which incorporated a forum space, a tool that troubleshoots code by scraping data online, and an API for basic programming. Received Overall Best Beginner Application, 3rd place for Palantir Social Impact Award, and top 10 Big Parser API Usage.
- **FIRST Tech Challenge:** Competed on a team to create a robot from metal to complete certain tasks in a competition on a field, including an autonomous period and a driver controlled period. Worked as the lead programmer, creating algorithms in Java with Android Studio. Achieved 1st place Design Award.

LEADERSHIP

- **TJ Machine Learning Club**
Teaching Coordinator Sep 2018 – Present
 - **Lecturing:** Teach machine learning algorithms in theory and in practice to nearly sixty students every week.
- **TJ Lincoln-Douglas Debate Team**
Teaching Coordinator Sep 2018 – Present
 - **Lecturing:** Teach debate and philosophies and help manage logistics of club.
 - **Volunteering:** Co-teach twenty students about fundamentals in debate at Eagle Ridge Middle School.
- **Summit For Future Innovators**
Co-founder Oct 2018
 - **Organizing:** Planned and ran day-long event for middle schoolers to engage in interactive workshops in physics, aeronautics, chemistry, robotics, and programming.

PROGRAMMING

- **Languages:** Python, Javascript, Java, C, HTML, CSS.
- **Libraries:** Keras, Scikit-learn, NumPy, OpenCV, OpenMP.
- **Technologies:** Linux, Bash, Git, SQL, Firebase.